

AMENDMENTS TO THE CLAIMS

Listing of Claims:

1.-3. (Canceled).

4. (Currently Amended) A method for identification of an object having an object surface, said method comprising:

illuminating a digital micro-mirror arrangement via a light source;

successively projecting a number of encoded illumination patterns by driving said digital micro-mirror arrangement to sequentially illuminate said object surface, with the digital micro-mirror arrangement being sequentially illuminated with at least three colors in a beam path through a variable color filter onto said object surface for identification of at least three depth planes of said object in a single image;

registering said image of said object with a color camera from a direction different from said beam path;

determining a three-dimensional image of a topography of said object surface from said registration in a control and evaluation unit, the determining including the use of at least triangulation principles; and

evaluating the three-dimensional image and a two-dimensional image of said object;

wherein said encoded illumination patterns include a stripe pattern for each of the at least three colors, and the stripe patterns have different periodicity in a video frame.

5. (Previously Presented) The method according to claim 4, wherein said encoded illumination patterns comprise a stripe pattern having successively varied periodicity.

6. (Previously Presented) The method according to claim 4, wherein said method is used for face identification.

7. (Currently Amended) A method for identification of an object having an object surface, said method comprising:

illuminating a digital micro-mirror arrangement via a light source;

successively projecting a number of encoded illumination patterns by driving said digital micro-mirror arrangement to sequentially illuminate said object surface, with the digital micro-mirror arrangement being sequentially illuminated with at least three colors in a beam path through a variable color filter onto said object surface for identification of at least three depth planes of said object in a single image;

registering said image of said object with a color camera from a direction different from said beam path;

determining a three-dimensional image of a topography of said object surface from said registration in a control and evaluation unit, the determining including the use of at least triangulation principles; and

comparing the three-dimensional image to pre-stored data;

wherein said encoded illumination patterns include a stripe pattern for each of the at least three colors, and the stripe patterns have different periodicity in a video frame.